

## IN THE CLAIMS

- 1 (Previously Presented). A method comprising:  
storing data in a first partition of a non-volatile storage media;  
storing, in a second partition of the non-volatile storage media, metadata  
corresponding to the data stored in the first partition of the non-volatile storage media; and  
accessing the second partition upon a system boot.
- 2 (Original). The method of claim 1, wherein storing the metadata as packed metadata  
block.
- 3 (Original). The method of claim 1, wherein the partitioning is logical.
- 4 (Previously Presented). The method of claim 1, wherein storing cache data in the  
first partition.
- 5 (Original). The method of claim 4, further comprising:  
updating the data and metadata atomically when a line of cache data in the first  
partitioned section is changed.
- 6 (Original). The method of claim 1, further comprising:  
allocating a portion of a mass storage device as the non-volatile storage media.
- 7 (Previously Presented). A non-volatile memory comprising:  
a first partition to store data; and  
a second partition from the first partition, the second partition to store metadata  
for the data stored in the first partition and wherein the second partition is accessed upon a  
system boot.
- 8 (Original). The memory of claim 7, wherein the second section is to store the  
metadata as packed metadata blocks.

9 (Previously Presented). The memory of claim 7, wherein the partitioning of the first partition and the second partition is logical.

10 (Previously Presented). The memory of claim 7, wherein the non-volatile memory is a portion of a mass storage device.

11 (Original). The memory of claim 10, wherein the mass storage device is one of a disk drive, a Flash memory, a ferroelectric random access memory, or a polymer ferroelectric random access memory.

12 (Original). The memory of claim 7, wherein the non-volatile memory is a cache memory.

13 (Previously Presented). A system comprising:  
a non-volatile storage media having a first partition and a second partition from the first partition;  
a memory control hub to cause the first partition to store data and the second partition to store metadata for the data stored in the first partition; and  
a processor coupled to the memory control hub to access said second partition on system boot.

14 (Previously Presented). The system of claim 13, wherein second partition is to store the metadata as packed metadata blocks.

15 (Previously Presented). The system of claim 13, wherein the partitioning of the first and second partitions is logical.

16 (Previously Presented). The system of claim 15, further comprising a mass storage device and wherein a portion of the massive storage device is the non-volatile storage media.

17 (Original). The system of claim 13, wherein the non-volatile storage media is a cache memory.

Claims 18-21 (Canceled).

22 (Previously Presented). A program loaded in a computer readable medium comprising:

- a first group of computer instructions to logically partition a non-volatile storage media;
- a second group of computer instructions to store data in a first partition of the non-volatile storage media;
- a third group of computer instructions to store metadata for the data in a second partition of the non-volatile storage media; and
- a fourth group of instructions to access the second partition during a system boot.

23 (Original). The program of claim 22, wherein the second group of computer instructions include computer instructions to store the metadata as packed metadata blocks.

24 (Previously Presented). The program of claim 22, wherein the second group of computer instructions include computer instructions to store cache data as the data in the first partition.

25 (Previously Presented). The program of claim 24, further comprising:  
computer instructions to update the data and metadata atomically when a line of cache data in the first partition is changed.

26 (Previously Presented). The program of claim 24, further comprising:  
computer instructions to access a line of the second partition to read metadata for the cache data in the first partition.

27 (Previously Presented). A program loaded in a computer readable medium comprising:  
a first group of computer instructions to logically partition a non-volatile storage media;

a second group of computer instructions to store cache data in a first partition of a non-volatile storage media;

a third group of computer instructions to store, in a second partition of the non-volatile storage media, metadata corresponding to the cache data stored in the first partition; and

a fourth group of instructions to access the second partition to determine the state of the cache data in a system boot.

28 (Original). The program of claim 27, wherein the third group of computer instructions includes computer instructions to store the metadata as packed metadata blocks.

29 (Previously Presented). The program of claim 27, further comprising:  
computer instructions to update the cache data and metadata atomically when a line of cache data in the first partition is changed.

30 (Original). The program of claim 27, further comprising:  
computer instructions to allocate a portion of a mass storage device as the non-volatile storage media.

Claims 31-44 (Canceled).